

Title (en)
Modular electronic packaging system.

Title (de)
Modulares elektronisches Verpackungssystem.

Title (fr)
Système modulaire d'emballage électronique.

Publication
EP 0461753 A2 19911218 (EN)

Application
EP 91303922 A 19910501

Priority
US 52043990 A 19900508

Abstract (en)
An electronic circuit packaging module (12) includes a lower substrate, (16), an upper cooling unit (18) and a frame (12) disposed therebetween. The substrate (16) carries a plurality of integrated circuit chips (26) with lead-outs to a plurality of downwardly protruding dimpled contact points (50) disposed about the substrate periphery. The frame (12) includes a plurality of insulative inserts (14) about its periphery having conductive pins (34) each with a lower extension (38) extending below the insert and an upper contact point (36) recessed within the insert. The cooling unit (18) includes a plurality of fluid bags (22) each in contact with a respective chip (26) on the substrate (16) for thermal management. A plurality of such modules (10) are stacked in vertical registry whereby each downwardly protruding dimple (50) of a module (10) extends into a respective insert recess (36) of an adjacent module (10) therebelow. Electrical contact is thus effected between the respective dimples (50) on the lower surface of the upper module (10) and respective upper contact points of the recessed pins (36) on the upper surface of the cover module. (10). <IMAGE>

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H01L 23/433; **H01L 25/065**; **H01L 25/10**; **H05K 7/02**

IPC 8 full level
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CPC (source: EP US)
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US7286365B2; EP0662245A4; EP0527583A3; EP0555659A3; FR2845821A1; US6037659A; EP0875933A3; CN103563501A; EP2717663A4; WO2004034761A1

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